REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

Claim 1 has been amended to overcome the applied indefiniteness rejections. Claim 7 has been amended to be consistent with the amendment of claim 1. Support for the amendment of claim 1 is provided for example in original claims 7 and 8. The amendments were not presented earlier due to the unforeseeability of the remarks presented in the Final Rejection.

The provisional double patenting rejections applied to claims 1, 3, 4, and 6-16 will be addressed by Applicants when the provisional status of the rejections is removed.

Claims 1, 3, 4, and 6-16 were rejected, under 35 USC §103(a), as being unpatentable over Vayanos et al. (US 6,901,063) in view of Das et al. (US 7,292,854). To the extent these rejections may be deemed applicable to the amended claims, the Applicants respectfully traverse based on the following points.

Claim 1 now defines a method of scheduling HARQ processes that restricts a reserved HARQ process to lower modulation coding scheme levels in accordance with the memory size of a soft buffer assigned to the reserved HARQ process. The claimed subject matter supports a more efficient use of the soft buffer (see specification page 12, second paragraph). (References herein to the specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to the referenced embodiments.)

Although the Final Rejection proposes that Vayanos discloses a plurality of HARQ processes having different priorities, the Final Rejection does not propose that Vayanos discloses the present claimed subject matter of restricting a reserved HARQ process to lower modulation

coding scheme levels. And since Vayanos does not disclose restricting a reserved HARQ process to lower modulation coding scheme levels, it necessarily follows that Vayanos *per force* cannot be deemed to disclose doing such in accordance with the memory size of a soft buffer assigned to the reserved HARQ process, as recited in present claim 1.

Moreover, by contrast to the present claimed subject matter of reserving a soft buffer for a HARQ process, Vayanos discloses that each HARQ channel can carry data meant for any re-ordering buffer (see Vayanos col. 7, lines 59-62). And Vayanos does not disclose different size buffers, as recited in claim 1.

Das is not cited in the Final Rejection for supplementing the teachings of Vayanos with respect to the above-mentioned subject matter distinguishing claim 1 from Vayanos.

Accordingly, the Applicants submit that Vayanos and Das, considered individually or in combination, do not render obvious the subject matter now defined by claim 1. Therefore, allowance of claim 1 and all claims dependent therefrom is considered to be warranted.

With regard to claim 7, the Final Rejection proposes that Das discloses the Applicants' laimed subject matter of a HARQ process that supports chase combining or incremental redundancy according to an available memory size in a soft buffer (see Final Rejection page 7, fourth paragraph).

However, Das nowhere uses the words chase, combining, and incremental, and the portion of Das' disclosure cited for teaching this subject matter seemingly has no relation to the Applicants' claimed subject matter. Instead, the cited portion discloses control field information employed in a control channel structure (see Das col. 6, lines 3-34). Vayanos is not cited for supplementing the teachings of Das in this regard.

With regard to claim 12, the Final Rejection proposes that Das discloses, somewhere in column 9, the present claimed subject matter in which the number of configured HARQ processes varies dynamically in accordance with a system parameter (see Final Rejection page 8, second paragraph). However, the Final Rejection provides no indication of what parameter disclosed by Das may have this effect or where within column 9 such a disclosure exists, and the content of Das' column 9 does not seem to support the allegation in the Final Rejection. Vayanos is not cited for supplementing the teachings of Das in this regard.

Claim 13 recites that the parameter defined in claim 12 is one of round trip time, processing time, traffic burstiness, quality of service, modulation coding scheme, timing of shared channels, and minimum transmission time interval. Since Das does not disclose varying the number of HARQ processes dynamically in accordance with a system parameter, as recited in instant claim 12, it necessarily follows that Das cannot disclose the specific type of parameter recited in claim 13, and Vayanos is not cited for supplementing the teachings of Das in this regard.

Therefore, allowance of claims 7, 12, and 13 is deemed to be warranted for these independent reasons.

To promote a better understanding of the claimed subject matter, the Applicants provide the following additional remarks.

The invention relates to a method for scheduling several HARQ processes. In related art systems in which all HARQ processes are simultaneously combining packets and high priority signaling is required, scheduling new data to an occupied HARQ process results in the flushing of a soft buffer's contents (see specification page 9, last paragraph). To overcome this problem,

the Applicants' claimed invention supports reserving one or more HARQ processes for higher priority data, thereby providing efficient communication for data having different priorities and, in particular, for delay critical signaling (see page 10, third paragraph). If no soft buffer memory is available for an additional HARQ process, one of the already available HARQ processes may be limited for specific data flows of high priority while the remaining HARQ processes maintain full flexibility (see page 10, last paragraph), at the expense of a reduced data throughput.

Conversely, in case of sufficient free soft buffer memory, one or more additional HARQ processes may be created having a limited functionality for only higher priority data. Advantageously, in order to minimize the soft buffer size for such reserved HARQ processes, it is possible to restrict the HARQ processes to low modulation coding scheme levels or certain packet sizes (see page 11, third paragraph and page 12, fourth paragraph). Consequently, if a Node B receives low rate and delay sensitive data, such as higher priority signaling, it may switch to a reserved HARQ process instead of using engaged HARQ processes, which would cause a user equipment's soft buffer to be flushed (see page 10, fourth paragraph).

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

Date: January 21, 2009
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